Abstract of the Disclosure

A rare earth garnet sintered compact which is produced by subjecting a rare earth garnet powder such as YAG to a pre-sintering, sintering the pre-sintered product by HIP, and annealing the sintered product at 1100°C to 1600°C in a whole oxygen atmosphere under a whole pressure of 4.5 MPa or more, and has an average crystallite diameter of 0.9 to 9 μ m, an optical loss coefficient of 0.002 cm⁻¹ or less and a strain of a transmitted wave of 0.05 λ cm⁻¹ or less.